

REMARKS/ARGUMENTS

In view of the claim amendments herein and the following remarks, reexamination and reconsideration of this application, withdrawal of the rejections, and formal notification of the allowability of all claims as presented are earnestly solicited. Claims 1-19 are pending, wherein Claims 1-19 have been rejected. Independent Claims 1, 11 and 19 have been amended to present the claims in proper U.S. format and to clarify the subject matter being claimed, and dependent Claims 2-10 and 12-18 have also been amended. In this regard, the amendments to the claims find support in the claims as filed, as well as throughout the Specification and the Drawings, and no new matter has been added. Accordingly, it is believed that the pending claims define patentable subject matter over the references cited in the Office Action and notice to such effect is requested at the Examiner's earliest convenience.

Objections – Specification

The abstract has been objected to as being in the format of a claim rather than that of an abstract. In response, Applicant requests deletion of the current abstract and submits a new abstract for consideration, which is believed to comply with Patent Office rules. As such, Applicant respectfully requests withdrawal of this objection at the Examiner's earliest convenience.

Claim Objections

Claims 1, 11 and 19 have been objected to due to lack of antecedent basis for the term "the travel surface" in each of the identified claims. In response, Applicant has amended Claims 1, 11 and 19 to provide appropriate antecedent basis for this term. As such, Applicant respectfully requests withdrawal of these objections at the Examiner's earliest convenience.

Claim Rejections – 35 U.S.C. §112, second paragraph

Claim 19 has been rejected as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. In response,

Applicant has amended Claim 19 to clearly identify the steps that form parts of the method claim. As such, Applicant respectfully requests withdrawal of this rejection at the Examiner's earliest convenience.

Claim Rejections – 35 U.S.C. §103

Claims 1, 2, 4, 5, 11, 12, 14, 15 and 19

Claims 1, 2, 4, 5, 11, 12, 14, 15 and 19 were rejected under 35 U.S.C. §103(a) as being unpatentable over German reference DE 20209542 in view of Japanese reference JP 7172359. In response, independent Claims 1 and 7 have been amended to clarify the subject matter being claimed. In response, Applicant respectfully submits the following remarks in asserting that independent Claims 1, 11 and 19 are not obviated the German '542 and Japanese '359 references, considered separately or in combination, and are thus patentable.

More particularly, independent Claims 1, 11 and 19 particularly claim an electric transport vehicle comprising two individually controllable and individually drivable drive wheels, a pick-up unit comprising at least one idle roller adapted for being continuously contacted with a travel surface, and a control unit which controls said two drive wheels in response to signals of a sensor unit for minimizing a deviation of said vehicle from said floor track signal, wherein said two drive wheels are arranged at a suitable distance in a driving direction behind the axis around which the pick-up unit is pivotable for maintaining said pick-up unit essentially within said electromagnetic field during travel for a maximum of said energy transfer.

In contrast, the German '542 reference discloses a transport system having an underfloor primary conductor for providing an electromagnetic field extending along said primary conductor for inductive energy transfer, and an electric transport vehicle comprising a pick-up unit with a secondary conductor for inductive energy transfer which is pivotable relative to said vehicle, a sensor unit adapted for sensing continuously a floor track signal, and a control unit which controls said wheel in response to signals of the sensor.

In this regard, the German '542 and Japanese '359 references fail to disclose an electric transport vehicle comprising two individually controllable and individually drivable drive wheels, a pick-up unit comprising at least one idle roller adapted for being continuously

contacted with a travel surface, and a control unit which controls said two drive wheels in response to signals of a sensor unit for minimizing a deviation of said vehicle from said floor track signal, wherein said two drive wheels are arranged at a suitable distance in a driving direction behind the axis around which the pick-up unit is pivotable for maintaining said pick-up unit essentially within said electromagnetic field during travel for a maximum of said energy transfer.

In this regard, embodiments of the present invention as claimed provide a transport system with inductive energy transfer from an underfloor primary conductor to a secondary conductor provided in a transport vehicle, wherein the transport vehicle is guided contactless, reliably, and essentially within the electromagnetic field of the primary conductor during travel with a maximum of energy transfer. That is, embodiments of the present invention are based on the concept of controlling the position of the pick-up unit in three-dimensional space in order to maximize the energy transfer at any given time of operation of the vehicle. Accordingly, the horizontal position is controlled by a control unit which controls two individually controllable and individually drivable drive wheels in response to signals of a sensor unit for minimizing a deviation of said vehicle from said floor track signal, wherein said two drive wheels are arranged at a suitable distance in driving direction behind the axis around which the pick-up unit is pivotable for maintaining said pick-up unit essentially within said electromagnetic field during travel for a maximum of said energy transfer. Moreover, the vertical position is controlled by at least one idle roller of the pick-up unit which is adapted for being continuously contacted with the travel surface. Accordingly, a deviation of the vehicle from the floor track signal may be compensated not only in a run of the vehicle through a curve, but also when the vehicle deviates from the floor track signal on a straight portion of the track system due to an uneven or rough travel surface or a hindrance or obstruction on the travel surface. In this regard, the German '542 and Japanese '359 references do not teach, suggest, provide motivation for, or otherwise render predictable a transport system / electric transport vehicle as claimed which is capable of compensating for such deviation based on the arrangement of the components recited in independent Claims 1, 11 and 19.

Further, the Japanese '359 reference does not disclose a pick-up unit being pivotable relative to said vehicle. Instead, the Japanese '359 reference discloses a steering sensor unit (6), which corresponds to a sensor unit adapted for sensing continuously a floor track signal according to the present invention. Moreover, the Japanese '359 reference does not disclose a pick-up unit comprising at least one idle roller adapted for being continuously contacted with a travel surface. Therefore, one of ordinary skill in the art at the time of the invention could not arrive at the subject matter of Claims 1, 11 and 19 by considering the combination of the German '542 and Japanese '359 references.

Moreover, since the Japanese '359 reference does not relate to a generic transport system, comprising a pick-up unit with a secondary conductor for inductive energy transfer, one of ordinary skill in the art would not consider the Japanese '359 reference when confronted with the problem of the present invention which requires a pick-up unit. Accordingly, one of ordinary skill in the art would not consider the Japanese '359 reference for maintaining the pick-up unit essentially within said electromagnetic field during travel for a maximum of said energy transfer, as recited in Claims 1, 11 and 19.

Also, the Applicants respectfully disagree with the Office Action's interpretation with respect to the claim language of Claims 1, 11 and 19 as to claimed invention. In this regard, Applicant notes that "as an initial matter, the PTO applies to the verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification." *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). As such, Applicant respectfully requests that the Examiner's interpretation of the above-noted claims take into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in Applicant's specification, rather than merely the broadest possible meaning.

Thus, for at least the reasons stated above, Applicant respectfully submits that Claims 1, 11 and 19 are not obviated by the German '542 and Japanese '359 references, considered separately or in combination. As such, Claims 1, 11 and 19, as well as dependent Claims 2, 4, 5,

12, 14, 15, which depend directly or indirectly from one of Claims 1 and 11, are patentable over the German '542 and Japanese '359 references, considered separately or in combination.

Claims 3, 6-8, 13 and 16

Claims 3, 6-8, 13 and 16 were rejected under 35 U.S.C. §103(a) as being unpatentable over German reference DE 20209542 in view of Japanese reference JP 7172359, and further in view of German reference DE 10013767. In response, Applicant respectfully submits that Claims 3, 6-8, 13 and 16, each of which depends directly or indirectly from one of Claims 1 and 11, are patentable for at least the reasons stated above with respect to Claims 1 and 11. In this regard, the German '542, Japanese '359, and German '767 references do not teach, suggest, provide motivation for, or otherwise render predictable an electric transport vehicle comprising two individually controllable and individually drivable drive wheels, a pick-up unit comprising at least one idle roller adapted for being continuously contacted with a travel surface, and a control unit which controls said two drive wheels in response to signals of a sensor unit for minimizing a deviation of said vehicle from said floor track signal, wherein said two drive wheels are arranged at a suitable distance in a driving direction behind the axis around which the pick-up unit is pivotable for maintaining said pick-up unit essentially within said electromagnetic field during travel for a maximum of said energy transfer, as recited by Claims 1 and 11. As such, Applicant respectfully submits that Claims 3, 6-8, 13 and 16, each of which depends directly or indirectly from one of Claims 1 and 11, are not obviated by, and are thus patentable over, the German '542, Japanese '359, and German '767 references, when considered separately or in combination.

Claims 9, 10, 17 and 18

Claims 9, 10, 17 and 18 were rejected under 35 U.S.C. §103(a) as being unpatentable over German reference DE 20209542 in view of Japanese reference JP 7172359, and further in view of German reference DE 10013767 and U.S. Patent No. 5, 938,151 to Takasan. In response, Applicant respectfully submits that Claims 9, 10, 17 and 18, each of which depends directly or indirectly from one of Claims 1 and 11, are patentable for at least the reasons stated

above with respect to Claims 1 and 11. In this regard, the German '542, Japanese '359, and German '767 references and the Takasan '151 patent do not teach, suggest, provide motivation for, or otherwise render predictable an electric transport vehicle comprising two individually controllable and individually drivable drive wheels, a pick-up unit comprising at least one idle roller adapted for being continuously contacted with a travel surface, and a control unit which controls said two drive wheels in response to signals of a sensor unit for minimizing a deviation of said vehicle from said floor track signal, wherein said two drive wheels are arranged at a suitable distance in a driving direction behind the axis around which the pick-up unit is pivotable for maintaining said pick-up unit essentially within said electromagnetic field during travel for a maximum of said energy transfer, as recited by Claims 1 and 11. As such, Applicant respectfully submits that Claims 9, 10, 17 and 18, each of which depends directly or indirectly from one of Claims 1 and 11, are not obviated by, and are thus patentable over, the German '542, Japanese '359, and German '767 references and the Takasan '151 patent, when considered separately or in combination.

Appl. No.: 10/588,038
Amdt. dated June 11, 2009
Reply to Office Action of March 11, 2009

CONCLUSION

In conclusion, the German '542 and Japanese '359 references **do not teach, suggest, provide motivation for, or otherwise render predictable** the embodiments of the present invention as claimed in independent Claims 1, 11 and 19. Accordingly, in view of the above differences between the embodiments of the Applicants' invention and the cited references, the Applicants submit that the present invention, as defined by the pending claims, is patentable over the references cited in the Office Action. As such, for the reasons set forth above, Claims 1-19 are believed to be in condition for immediate allowance and notice to such effect is respectfully requested at the Examiner's earliest opportunity.

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 CFR § 1.136(a), and any fee required therefor (including fees for net addition of claims) is hereby authorized to be charged to Deposit Account No. 16-0605.

Respectfully submitted,

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ELECTRONICALLY FILED USING THE EFS-WEB ELECTRONIC FILING SYSTEM OF THE UNITED STATES PATENT & TRADEMARK OFFICE ON June 11, 2009.